PEACE/WILLISTON
FISH & WILDLIFE
COMPENSATION
PROGRAM

BC hydro

BRITISH COLUMBIA

Ingenika River Elk Transplant Proposal

M. D. Wood
November 1993

PWFWCP Report No. 30

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The Peace/Williston Fish & Wildlife Compensation Program is a cooperative venture of BC Hydro and the provincial fish and wildlife management agencies, supported by funding from BC Hydro. The Program was established to enhance and protect fish and wildlife resources affected by the construction of the W.A.C. Bennett and Peace Canyon dams on the Peace River, and the subsequent creation of the Williston and Dinosaur Reservoirs.

Peace/Williston Fish and Wildlife Compensation Program, 1011 Fourth Ave. 3rd Floor, Prince George B.C. V2L 3H9

Website: *www.bchydro.bc.ca/environment/initiatives/pwcp/*

This report has been approved by the Peace/Williston Fish and Wildlife Compensation Program Fish Technical Committee.

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INGENIKA RIVER ELK TRANSPLANT PROPOSAL

This proposal was submitted to the B.C. Environment Wildlife Branch, for approval to transplant elk into the Ingenika River drainage.

1. APPLICANT:

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2. PURPOSE OF TRANSPLANT:

The Ingenika River area currently supports a resident population of 30-40 elk. The transplant of 50 to 60 Rocky Mountain elk from the Peace Region to this area aims to supplement the small existing herd of elk, providing a new and vigorous gene pool and increasing the herds' reproductive potential. The objective of the transplant is to establish a viable population of elk in the area. In reference to the small elk herds currently existing in the Omineca Sub-Region, it was stated in the Elk Management Plan for B.C. 1992-1997 that "These populations are expanding only slowly, and supplemental elk transplants may be required to stimulate poulation growth" (Demarchi et al, 1992). Wildlife 2001 also makes a committment to deal with agricultural land use conflicts. Elk will be taken from areas in the Peace Region where conflicts are currently occurring.

3. SEX AND AGE RATIO OF ANIMALS:

Between 50 and 60 adult and juvenile Rocky Mountain elk *(Cervus elaphus nelsoni)* will be captured and transplanted to the Ingenika area. A ratio of five females for every male is desired, but will depend on the sex ratio of those animals captured in the traps.

4. STOCK ORIGIN AND HOLDING LOCATIONS:

Approximately half of the 50 elk will be captured at the Lone Prarie site, the other half at the Halfway River site. Both areas harbour significant numbers of elk in winter which compete with livestock for hay resources, causing conflicts with local ranchers. The elk will be baited into corral traps with hay and held until ready for transport. All animals will be ear-tagged; a sample will be radio-collared for future monitoring.

5. TRANSPORT METHOD AND TRANSPLANT DATE:

The elk will be baited into corral traps about three weeks prior to the transplant which is scheduled for February 1994. The elk will be easier to capture in mid-winter while concentrated on agricultural lands. The elk will be transported in a large livestock trailer from the Peace area via Hwy 97 to Mackenzie Junction, then north up the Finlay Forest Rd. on the west side of the Williston Reservoir. A winter ice bridge will be used to cross the Ingenika River, enabling the elk to be released directly onto currently used south facing winter ranges.

6. SOURCE STOCK INFECTIOUS DISEASE AND/OR PARASITE HISTORY:

Transplanting of elk from the Kootney Region into northern B.C. has been halted since the many of the elk are hosts for the giant liver fluke. Recent analyses of elk livers from northern B.C., has revealed only one liver infected with the fluke (Blower, 1990). It is suspected that the flukes cannot survive in northern boreal environments. Elk free from liver flukes will be taken from the Peace Region. Elk in the corral traps will be directed through shutes, and examined and innoculated by a veterinarian prior to transport.

7. PROPOSED RELEASEMENT SITE (MAP ATTACHED):

The elk will be released onto south facing slopes near Ingenika Crag, on the north side of the Ingenika River (Figure 1). The Ingenika River valley ... within the BWBSdkl cool dry biogeoclimatic zone. Areas over 1100 metres in elevation lie within the SWBb cold dry zone. Snow depths are low to moderate: measurements taken in the winter of 1990 showed 53 cm at 740 metres elevation. The extensive south facing slopes on the north side of the valley lie between 700 and 1200 metres in elevation. These slopes and the adjacent Ingenika valley provide the main winter range areas for the elk currently using the area. The slopes were subjected to a wildlife in 1970, and are dominated by early seral stages of aspen and young pine, with older patchs of pine, spruce or aspen especially at lower elevations near the riparian zone. Higher mountainous summer range exists to the north and west of the area.

8. ASSESSMENT OF TRANSPLANT IMPACT ON RESOURCES AND PROPERTY:

There are no land tenures of concern in the area. The local trapline and associated cabins in the immediate area of the transplant belong to the local guide outfitter. The only grazing leases in the area are held by the two local guides. Neither guide uses the Ingenika River area for wintering horses.

There are no negative impacts expected on the wildlife resources and habitat in the Ingenika area: competition between species is expected to be minimal. A small population of elk currently exists in the area and will benefit from the immigration of other elk. The other

grazing ungulate in the area is the Stone's sheep which are concentrated on the Russell Range over 30 km to the north of the transplant area. The sheep are found at higher elevations especially during the critical winter period, and are unable to tolerate the deeper snows that elk can. Although elk can be flexible in their foraging habits, they are predominantly grazers, therefore little competition for food resources is expected with browsers such as moose and deer. Moose, elk and deer are known to coexist in many other areas.

The elk transplant site is directly south of the Russel Range Study Area - a candidate area under study for future Protected Area Status. Establishing a viable herd of elk in the vicinity of the Russel Range Study Area, is compatible with the objectives of preserving the wildlife resources of this area through Protected Area Status. Blocks proposed for timber harvesting in the Goldeneye Lake area west of the elk release site have been deferred since they fall within the Study Area boundary. Some small business blocks are currently designated for harvesting to the east of the transplant site, and the potential for nature timber harvesting in the area still exists.

9. FUTURE MANAGEMENT PLANS (EG. USE, ENHANCEMENT):

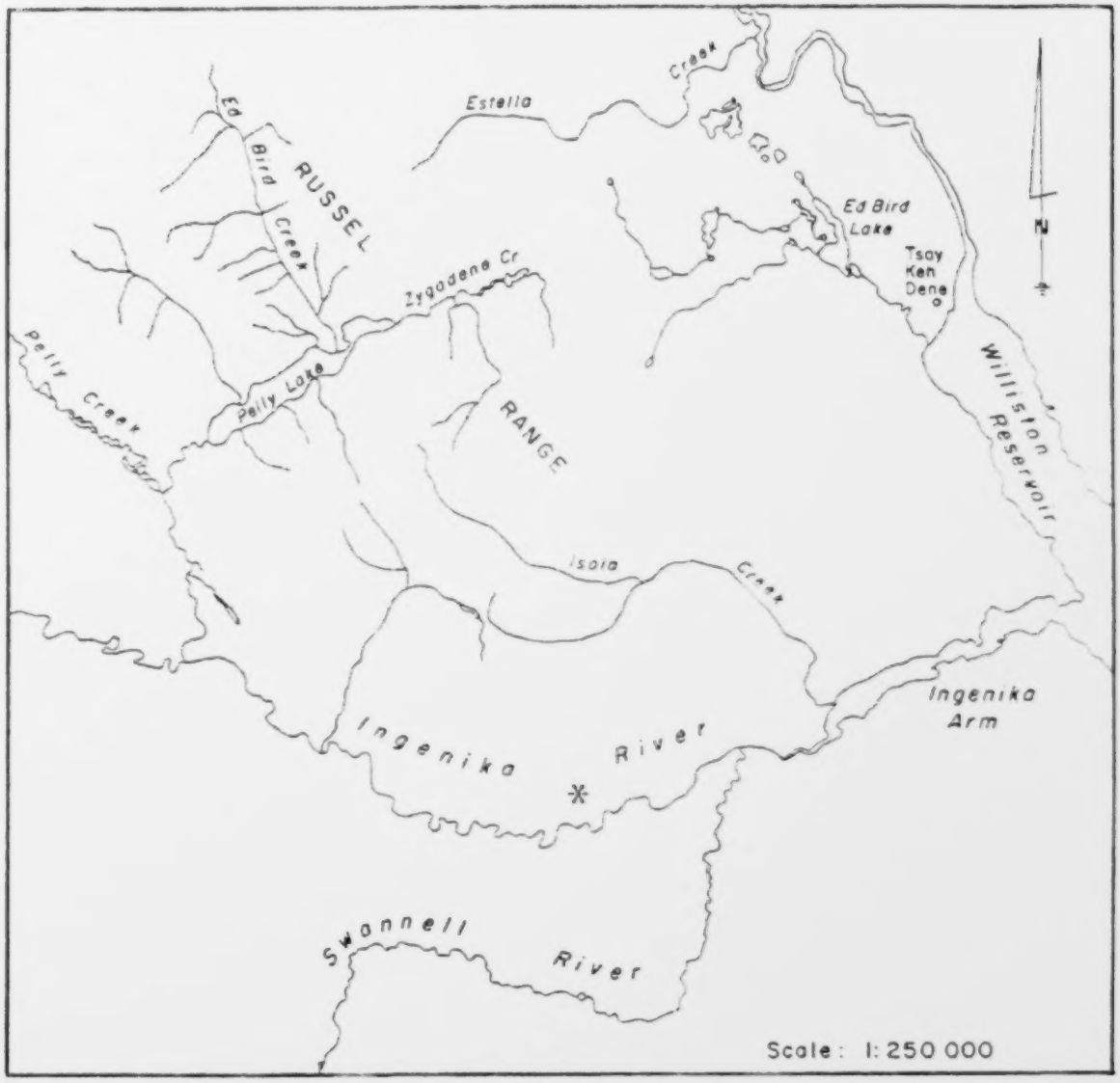
The elk will be protected from harvest until a viable herd that can withstand some harvest pressure is established. This will require the co-operation of the local native band to retrain from sustenance hunting of elk until such time as the population can support it without damage. Ten to 20 elk will be radio-collared to monitor their seasonal use of habitats, migration routes and overall success of the transplant. Population inventories will also be conducted. Prescribed burning of the Ingenika Crag deciduous sidehills will be conducted in addition to other suitable sites in the area. If nature forest harvesting is allowed in the area, access management will be pursued as a high priority. Future transplants of elk to the Akie/Pesika Creek drainages northeast of Ingenika will be investigated. These drainages currently support about 30 to 40 overwintering elk, with higher summer populations due to the westward movement of elk from the headwaters of the Muskwa and Prophet Rivers. It is presumed that the Akie/Pesika elk intermix with the Ingenika herd as well; an area of low snowfall connects the two areas.

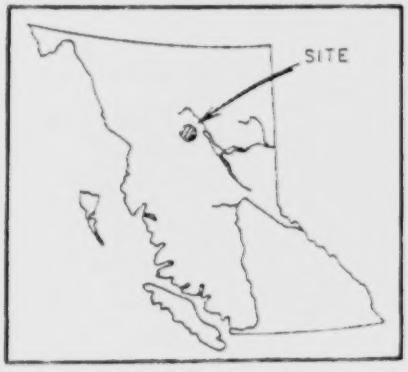
Prescribed burning has been conducted north of the Ingenika area: the south slopes at Pelly Lake were burned in the spring of 1993. Elk have been observed in the Pelly Creek area, and it is anticipated that the burned slopes will encourage the elk to expand their range further north into these areas. Prescribed burns were also conducted in the Akie River (1991) and Pesika Creek (1993) drainages to the northeast.

10. LIST OF AGENCIES/STAKEHOLDERS CONTACTED:

BC Environment (Prince George) - Doug Heard, Regional Wildlife Biologist
BC Environment (Ft. St. John) - Brian Churchill, Regional Habitat Biologist
BC Forest Service (Mackenzie) - Rod DeBoice, District Manager
BC Environment (Mackenzie) - Dana Becker, Forest Ecosystem Specialist
Guide-Outfitters - Dave Burr and Sam Kostynuk
Trapper - Dianne Burr
Tsay Keh Dene - Chief Gordon Pierre, and Band Manager Mike Metcalf
Finlay Forest Industries - Joan Thomas, Chief Forester
Fletcher Challenge - Alan Simcoe, Integrated Resources Biologist
Regional Protected Areas Team - Donna Humphries, Chairperson

Several consultation meetings to discuss the transplant were held with the Tsay Keh Dene. The Band agreed verbally to support the transplant, and to do what they could to assist the elk population to grow. A written commitment from the Band at this time is not expected.





* Elk Transplant Release Site